



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/609,635	07/01/2003	Koichi Takahashi	12577/17	8522
23838	7590	12/29/2005	EXAMINER	
KENYON & KENYON 1500 K STREET NW SUITE 700 WASHINGTON, DC 20005			VALENTIN, JUAN D	
			ART UNIT	PAPER NUMBER
			2877	

DATE MAILED: 12/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/609,635	Applicant(s) TAKAHASHI ET AL.	
	Examiner Juan D. Valentin II	Art Unit 2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Restriction Election 06/27/2005.
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-88 is/are pending in the application.
4a) Of the above claim(s) 1-42, 44-61, 66, 70-73, 75, 76 and 80-82 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 43, 62-65, 67-69, 74, 77-79 and 83-88 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 01 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>07/01/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of species 17 (Figs. 24A-24C) in the reply filed on 06/27/2005 is acknowledged. The traversal is on the ground(s) that claims 80-88 are generic.

This is not found persuasive because claims 80 & 82 are drawn to non-elected species 1 (Figs. 2A & 2B) and claim 81 is drawn to Fig. 40, which examiner unintentionally omitted from the Election/Restriction requirement as Species 25. Claim 66 is drawn to species 16 (Fig. 23) and claim 70 is drawn to species 19 (Fig. 26). Further, claims 86-88 are drawn to the same subject matter as elected species 17 (claim 62), therefore are not generic but rather part of species 17. These claims shown above as not generic and not part of species 17 will not be examined as they are not part of the elected species 17. Examiner stated in the Election/Restriction requirement that claims 43 & 83-85 are generic, therefore claims 43, 83-85 will be examined with the elected Species 17 claims 62-65, 67-69, 74, 77-79, & 86-88.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 43, 62-65, 67-69, 74, 77-79, & 83-88 rejected under 35 U.S.C. 102(e) as being anticipated by Maruyama (USPAPN 2003/0053732 A1).

Claims 43, & 83-85

Maruyama in conjunction with Fig. 13, discloses a light source 22 for radiating light to the light-deflecting element 25, a detecting reflection surface 25a with positive power provided to the light reflecting element 25, placed on an optical axis of light radiated from the light source 22, and a photodetector 30 receiving light reflected by the detecting reflection surface 25a to detect the deflection angle of the light deflecting element in accordance with a position where the light is received [0114-0136].

Claims 62 & 86-88

Maruyama in conjunction with Fig. 13, discloses a light source 22 for radiating light to the light deflecting element 27, a detecting reflection surface inclined by a preset angle with respect to an optical axis of light radiated from the light source and provided to the light-deflecting element, a reflected-light condensing optical element 25 with positive power for condensing light reflected by the detecting reflection surface 27, and a photodetector 30 receiving light from the reflected-light condensing optical element 25 to detect the deflection angle of the light-deflecting element in accordance with a position where the light is received [0114-0136].

Claims 63-65, 67-69, 74, & 77-79

Maruyama as applied above further discloses the condensing element having an entrance surface, an exit surface, and a positive power irrotational symmetrical reflecting surface (Fig 13). Further it can be seen that light emitted from light source 22 and exiting the condensing lens 26

Art Unit: 2877

(Fig. 13) is incident on deflecting optical element 27 at an angle between 10 and 70 degrees and further the axial chief ray is incident on the positive power reflection surface at an angle α between 20 and 110 degrees (see Fig. 13, reflected rays 29 passing through condenser 26 incident on surface 25a).

The detector of Maruyama has four-divided light receiving surfaces (Fig. 17, refs. 31a-31d, [0131]).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juan D. Valentin II whose telephone number is (571) 272-2433. The examiner can normally be reached on Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on (571) 272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2877

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Juan D Valentin II
Examiner 2877
JDV
December 24, 2005



HWA (ANDREW) LEE
PRIMARY EXAMINER